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TECH CENTER 1600/2900

1600

RAW SEQUENCE LISTING

DATE: 07/28/2003

PATENT APPLICATION: US/09/723,752B

TIME: 09:47:07

Input Set : A:\P1093P1D1.txt

Output Set: N:\CRF4\07282003\I723752B.raw

SEQUENCE LISTING

W--> 3 SEQUENCE LISTING

5 (1) GENERAL INFORMATION:

7 (i) APPLICANT: Baca, Manuel

8 Wells, James A.

9 Presta, Leonard G.

10 Lowman, Henry B.

11 Chen, Yvonne M.

13 (ii) TITLE OF INVENTION: ANTI-VEGF ANTIBODIES

15 (iii) NUMBER OF SEQUENCES: 131

17 (iv) CORRESPONDENCE ADDRESS:

18 (A) ADDRESSEE: Genentech, Inc.

19 (B) STREET: 1 DNA Way

20 (C) CITY: South San Francisco

21 (D) STATE: California

22 (E) COUNTRY: USA

23 (F) ZIP: 94080

25 (v) COMPUTER READABLE FORM:

26 (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

27 (B) COMPUTER: IBM PC compatible

28 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

29 (D) SOFTWARE: WinPatin (Genentech)

31 (vi) CURRENT APPLICATION DATA:

C--> 32 (A) APPLICATION NUMBER: US/09/723,752B

C--> 33 (B) FILING DATE: 27-Nov-2000

34 (C) CLASSIFICATION:

40 (vii) PRIOR APPLICATION DATA:

37 (A) APPLICATION NUMBER: 08/908469

38 (B) FILING DATE: 06-AUG-1997

41 (A) APPLICATION NUMBER: 08/833504

42 (B) FILING DATE: 07-APR-1997

44 (viii) ATTORNEY/AGENT INFORMATION:

45 (A) NAME: Cui, Steven X.

46 (B) REGISTRATION NUMBER: 44,637

47 (C) REFERENCE/DOCKET NUMBER: P1093P1D1

49 (ix) TELECOMMUNICATION INFORMATION:

50 (A) TELEPHONE: 650/225-8674

51 (B) TELEFAX: 650/952-9881

52 (2) INFORMATION FOR SEQ ID NO: 1:

54 (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 10 amino acids

56 (B) TYPE: Amino Acid

57 (D) TOPOLOGY: Linear

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```

59      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
61  Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
62    1          5          10
64 (2) INFORMATION FOR SEQ ID NO: 2:
66      (i) SEQUENCE CHARACTERISTICS:
67          (A) LENGTH: 17 amino acids
68          (B) TYPE: Amino Acid
69          (D) TOPOLOGY: Linear
71      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
73  Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
74    1          5          10          15
76  Lys Arg
79 (2) INFORMATION FOR SEQ ID NO: 3:
81      (i) SEQUENCE CHARACTERISTICS:
82          (A) LENGTH: 14 amino acids
83          (B) TYPE: Amino Acid
84          (D) TOPOLOGY: Linear
86      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
88  Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
89    1          5          10
91 (2) INFORMATION FOR SEQ ID NO: 4:
93      (i) SEQUENCE CHARACTERISTICS:
94          (A) LENGTH: 11 amino acids
95          (B) TYPE: Amino Acid
96          (D) TOPOLOGY: Linear
98      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
100 Ser Ala Ser Gln Asp Ile Ser Asn Tyr Leu Asn
101  1          5          10
103 (2) INFORMATION FOR SEQ ID NO: 5:
105      (i) SEQUENCE CHARACTERISTICS:
106          (A) LENGTH: 7 amino acids
107          (B) TYPE: Amino Acid
108          (D) TOPOLOGY: Linear
110      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
112 Phe Thr Ser Ser Leu His Ser
113  1          5
115 (2) INFORMATION FOR SEQ ID NO: 6:
117      (i) SEQUENCE CHARACTERISTICS:
118          (A) LENGTH: 9 amino acids
119          (B) TYPE: Amino Acid
120          (D) TOPOLOGY: Linear
122      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
124 Gln Gln Tyr Ser Thr Val Pro Trp Thr
125  1          5
127 (2) INFORMATION FOR SEQ ID NO: 7:
129      (i) SEQUENCE CHARACTERISTICS:
130          (A) LENGTH: 118 amino acids
131          (B) TYPE: Amino Acid
132          (D) TOPOLOGY: Linear

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134 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

136	Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly	
137	1 5 10 15	
139	Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr	
140	20 25 30	
142	Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu	
143	35 40 45	
145	Glu Trp Val Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr	
146	50 55 60	
148	Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser	
149	65 70 75	
151	Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp	
152	80 85 90	
154	Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser	
155	95 100 105	
157	Ser His Trp Tyr Phe Asp Val Trp Gly Gln Gly Thr Leu	
158	110 115	

160 (2) INFORMATION FOR SEQ ID NO: 8:

162 (i) SEQUENCE CHARACTERISTICS:

163 (A) LENGTH: 110 amino acids

164 (B) TYPE: Amino Acid

165 (D) TOPOLOGY: Linear

167 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

169	Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val	
170	1 5 10 15	
172	Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser	
173	20 25 30	
175	Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys	
176	35 40 45	
178	Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser	
179	50 55 60	
181	Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile	
182	65 70 75	
184	Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln	
185	80 85 90	
187	Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu	
188	95 100 105	
190	Ile Lys Arg Thr Val	
191	110	

193 (2) INFORMATION FOR SEQ ID NO: 9:

195 (i) SEQUENCE CHARACTERISTICS:

196 (A) LENGTH: 123 amino acids

197 (B) TYPE: Amino Acid

198 (D) TOPOLOGY: Linear

200 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

202	Glu Ile Gln Leu Val Gln Ser Gly Pro Glu Leu Lys Gln Pro Gly	
203	1 5 10 15	
205	Glu Thr Val Arg Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr	
206	20 25 30	

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208 Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu
209                      35                      40                      45
211 Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
212                      50                      55                      60
214 Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Glu Thr Ser
215                      65                      70                      75
217 Ala Ser Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp
218                      80                      85                      90
220 Thr Ala Thr Tyr Phe Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser
221                      95                     100                     105
223 Ser His Trp Tyr Phe Asp Val Trp Gly Ala Gly Thr Thr Val Thr
224                      110                    115                    120

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226 Val Ser Ser

229 (2) INFORMATION FOR SEQ ID NO: 10:

231 (i) SEQUENCE CHARACTERISTICS:

232 (A) LENGTH: 108 amino acids

233 (B) TYPE: Amino Acid

234 (D) TOPOLOGY: Linear

236 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

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238 Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu
239 1                      5                      10                      15
241 Gly Asp Arg Val Ile Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser
242                      20                      25                      30
244 Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys
245                      35                      40                      45
247 Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
248                      50                      55                      60
250 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
251                      65                      70                      75
253 Ser Asn Leu Glu Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln
254                      80                      85                      90
256 Tyr Ser Thr Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu
257                      95                     100                     105

```

259 Ile Lys Arg

262 (2) INFORMATION FOR SEQ ID NO: 11:

264 (i) SEQUENCE CHARACTERISTICS:

265 (A) LENGTH: 113 amino acids

266 (B) TYPE: Amino Acid

267 (D) TOPOLOGY: Linear

269 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

```

271 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
272 1                      5                      10                      15
274 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
275                      20                      25                      30
277 Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
278                      35                      40                      45
280 Glu Trp Val Ser Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr
281                      50                      55                      60
283 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser

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```

284          65          70          75
286 Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
287          80          85          90
289 Thr Ala Val Tyr Tyr Cys Ala Arg Gly Phe Asp Tyr Trp Gly Gln
290          95         100         105
292 Gly Thr Leu Val Thr Val Ser Ser
293          110
295 (2) INFORMATION FOR SEQ ID NO: 12:
297   (i) SEQUENCE CHARACTERISTICS:
298       (A) LENGTH: 108 amino acids
299       (B) TYPE: Amino Acid
300       (D) TOPOLOGY: Linear
302   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
304 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
305   1          5          10          15
307 Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
308          20          25          30
310 Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
311          35          40          45
313 Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
314          50          55          60
316 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
317          65          70          75
319 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
320          80          85          90
322 Tyr Asn Ser Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
323          95         100         105
325 Ile Lys Arg
328 (2) INFORMATION FOR SEQ ID NO: 13:
330   (i) SEQUENCE CHARACTERISTICS:
331       (A) LENGTH: 107 amino acids
332       (B) TYPE: Amino Acid
333       (D) TOPOLOGY: Linear
335   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
337 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
338   1          5          10          15
340 Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser
341          20          25          30
343 Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
344          35          40          45
346 Leu Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
347          50          55          60
349 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
350          65          70          75
352 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
353          80          85          90
355 Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
356          95         100         105
358 Ile Lys

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